2 0 1 8

Full Marks : 75

Time : 3 hours

The questions are of equal value

Answer **five** questions, selecting at least **one** from each Group

Group—A

1. What are the object-oriented features in C++ ? How is it different with procedural language? Write the advantages of OOP's over procedural language.

2. What is class and how to create it in C++ ? Explain the different access specifiers. Discuss the features of member function and static member variable with suitable example.

3. What do you mean by operator overloading? List the operators which cannot be overloaded. Write a program to overload operator + using friend function.

4. Write notes on the following :

(a) Inheritance

(b) Constructors and destructors.

Group—B

5. What is network topology and what are its different types? Explain with suitable diagrams and their advantages and disadvantages.

6. Draw the OSI network architecture. Briefly explain the functionalities of every layer.

7. Write short notes on the following :

(a) Email

(b) Internet

(c) HTTP.

Group—C

8. How is main memory organized in the computer system? What is memory hierarchy? Discuss the process of data recording on magnetic tape.

9. What is handshaking in terms of data transfer? Explain its advantages.

10. Explain the following :

(a) Cache memory

(b) ROM

(c) Virtual memory.

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